

HEPATITIS A VACCINE IS NOT REQUIRED IN ADULT PATIENTS WITH CHRONIC LIVER DISEASE IN SAUDI ARABIA

Dear Sir,

It is well known that acute hepatitis A virus (HAV) infection in patients with chronic liver disease (CLD) carries a higher mortality.⁽¹⁾ This outcome is further affected by the extent of pre-existent liver damage and consequent liver dysfunction. The prognosis of acute HAV infection in subjects who are chronically infected with hepatitis B (HBV) or C (HCV) infection but with normal transaminases and liver histology is quite good and is similar to infection in otherwise completely healthy subjects. However, the risk of severe or fatal illness is high if the infection occurs in the presence of chronic hepatitis or liver cirrhosis.⁽²⁾ Based on these data, the Advisory Committee on Immunization Practices has recommended that all patients with CLD should be immunised against HAV infection.⁽³⁾

To answer the question of whether adult patients with CLD need a hepatitis A vaccine to prevent HAV superinfection, it is important to determine the prevalence of protective antibodies or IgG-anti HAV in this population. In developed countries, the prevalence of such antibodies in adults is low and hence, the recommendation of administering hepatitis A vaccine in adult CLD patients routinely is not only justified but may also be cost-effective.^(2,3)

Saudi Arabia has a high population of patients with CLD, especially those related to HBV infection.⁽⁴⁾ A report from the eastern province of Dammam has shown the prevalence of IgG-HAV to be 3% in the younger than six years age group or pre-school age, which increases to 62% in the 6–8 years age group and 93% in older children.⁽⁵⁾ The study on the prevalence of IgG-HAV was reported in healthy children from Saudi Arabia; however, there are no such reports for both adults as well as CLD patients. The present analysis was done to determine the prevalence of IgG-anti HAV in adult CLD patients to assess their need for hepatitis A vaccination.

A total of 136 patients (130 Saudis with an age range of 17–90 years; mean age 39.1 ± 17.6 years) with CLD seen at the King Fahd Central Hospital, Jizan, Saudi Arabia, from June 2002 to January 2004 were checked for IgG-anti HAV by enzyme-linked immunosorbent assay using commercially-available kits. Of these, 80 were males and 56 were females. 91 (67%) of these were HBsAg +ve and 12 (9%) were anti-HCV +ve. Five patients had autoimmune chronic hepatitis while two had Wilson's disease as the cause of CLD and one had a dual (HBV+HCV) infection. No cause of CLD could be identified in 25 (18%) patients. 28 (21%) of these patients with CLD also had associated hepatocellular carcinoma (HCC). None of these patients has had a prior hepatitis A vaccination. In addition, 224 patients attending the gastrointestinal clinic with either non-ulcer dyspepsia or irritable bowel syndrome were simultaneously tested for IgG-anti HAV antibodies. These patients served as the control group and none of them had present or past evidence of liver disease. They were comparable to patients with CLD in terms of age, gender and nationality.

134 (98.5%) CLD patients tested positive for anti-HAV antibodies. This observation indicates the presence of acquired immunity in adult CLD patients in Saudi Arabia due to previous exposure to HAV infection. The positivity was not related to the aetiology of CLD or the presence/absence of HCC. 221 (98.6%) patients from the control group also tested positive for IgG-anti-HAV.

In conclusion, our data shows a very high prevalence of anti-HAV antibodies in adult CLD patients in Saudi Arabia and, therefore, these patients do not require a hepatitis A vaccine for the prevention of acute HAV infection.

Yours sincerely,

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